

FAST FUEL FACTS

Electric



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This document has been reviewed by selected representatives of vehicle manufacturers, fuel providers, fleet operators, and federal and state governments. A technical review committee has also reviewed the publication.



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FUEL DESCRIPTION

- ◆ Onboard rechargeable batteries power an electric motor.

DOMESTIC CONTENT OF FUEL

- ◆ Based on Energy Policy Act definition, over 95%, depending on current mix of input energy (coal, natural gas, nuclear, hydropower, renewables) for electric-power generation.

FUELING

- ◆ Onboard charger connects to standard 110- or 220-volt outlet, full charging takes four to eight hours; special 440-volt outlet charges to 80% in less than one hour.

FUEL AVAILABILITY

- ◆ Most homes and businesses have outlets, but special hookups or upgrades may be required.
- ◆ Public charging networks are developing in California and other sites. *Contact sources on back.*

VEHICLE EXPERIENCE AND AVAILABILITY

- ◆ Fleets totaling over 500 vehicles have operated for several years in California, Arizona, and at local utilities.
- ◆ For model year 1995, Chrysler offers 25 minivans (Caravan/Voyager platform) with nickel-cadmium or nickel-iron battery pack; full three-year/36,000-mile OEM warranty.
- ◆ Ford is leasing 82 of 105 research vehicles (model year 1995 Ecostar microvans) to utility and government fleet customers in North America and Europe. No additional units are available.

- ◆ Conversions are available in larger metropolitan areas. Contact OEM dealer for qualified converter and warranty information.

OPERATIONAL PERFORMANCE

- ◆ Current technology is best suited for range of less than 50 miles between chargings.
- ◆ Battery weight limits payload and range; use of accessories (such as heating and air conditioning) limits range if powered off battery.
- ◆ More energy-efficient.
- ◆ Acceleration, speed equivalent to those of comparable internal-combustion engine.

MAINTENANCE AND RELIABILITY

- ◆ Battery packs are replaced, on average, every 30,000 miles or three years.
- ◆ Low component wear means less downtime and maintenance; no tune-ups or oil changes are needed. Tires may need more frequent replacement due to vehicle weight.
- ◆ Unless sealed batteries are used, battery water should be checked daily; may need to add water every two weeks.

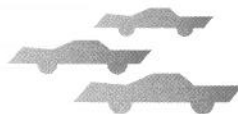
SAFETY

- ◆ Training is required to operate and maintain vehicles.

COSTS

- ◆ Each battery replacement equals 15-20% or more of original vehicle cost.
- ◆ New electric van costs four to five times more than comparable gasoline-powered van.
- ◆ Electricity costs no more than, and likely less than, gasoline; local utility rates vary.
- ◆ Charging facility may require only minimal costs.
- ◆ Auto manufacturers, utilities, and converters may assist with technician training.
- ◆ May need to purchase service and diagnostic equipment if access to commercial electric vehicle maintenance facilities is not available.

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FOR MORE INFORMATION, CONTACT:

- ◆ Electric Transportation Coalition (202/508-5995)
- ◆ The Electric Vehicle Association of the Americas (408/253-5262)
- ◆ Edison Electric Institute (202/508-5000)
- ◆ Electric Power Research Institute (415/855-2984)
- ◆ National Association of Fleet Administrators (908/494-8100)
- ◆ National Alternative Fuels Hotline (800/423-1DOE)
- ◆ Your local electric utility

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